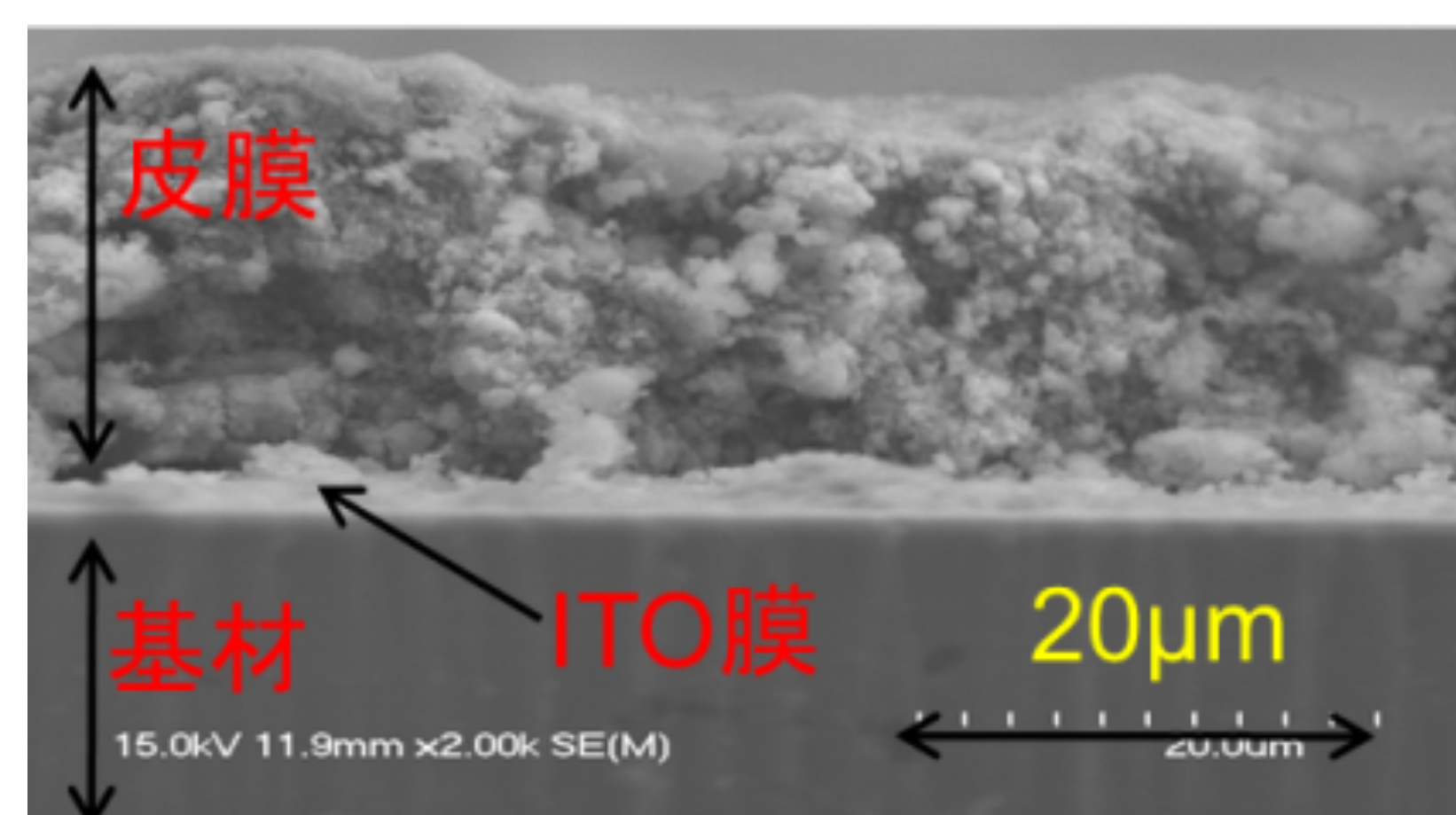
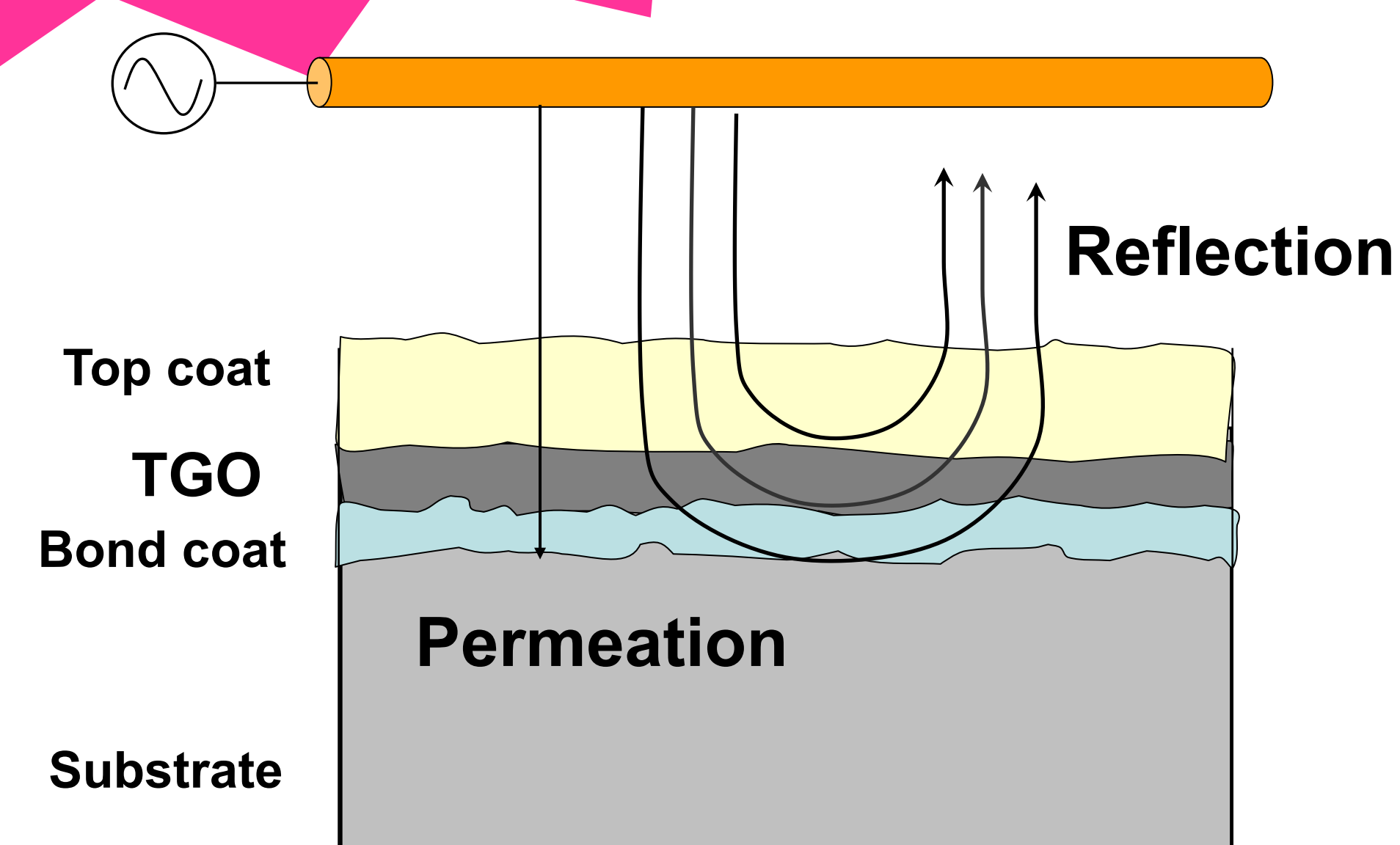


Improved BC material
Higher adhesion strength

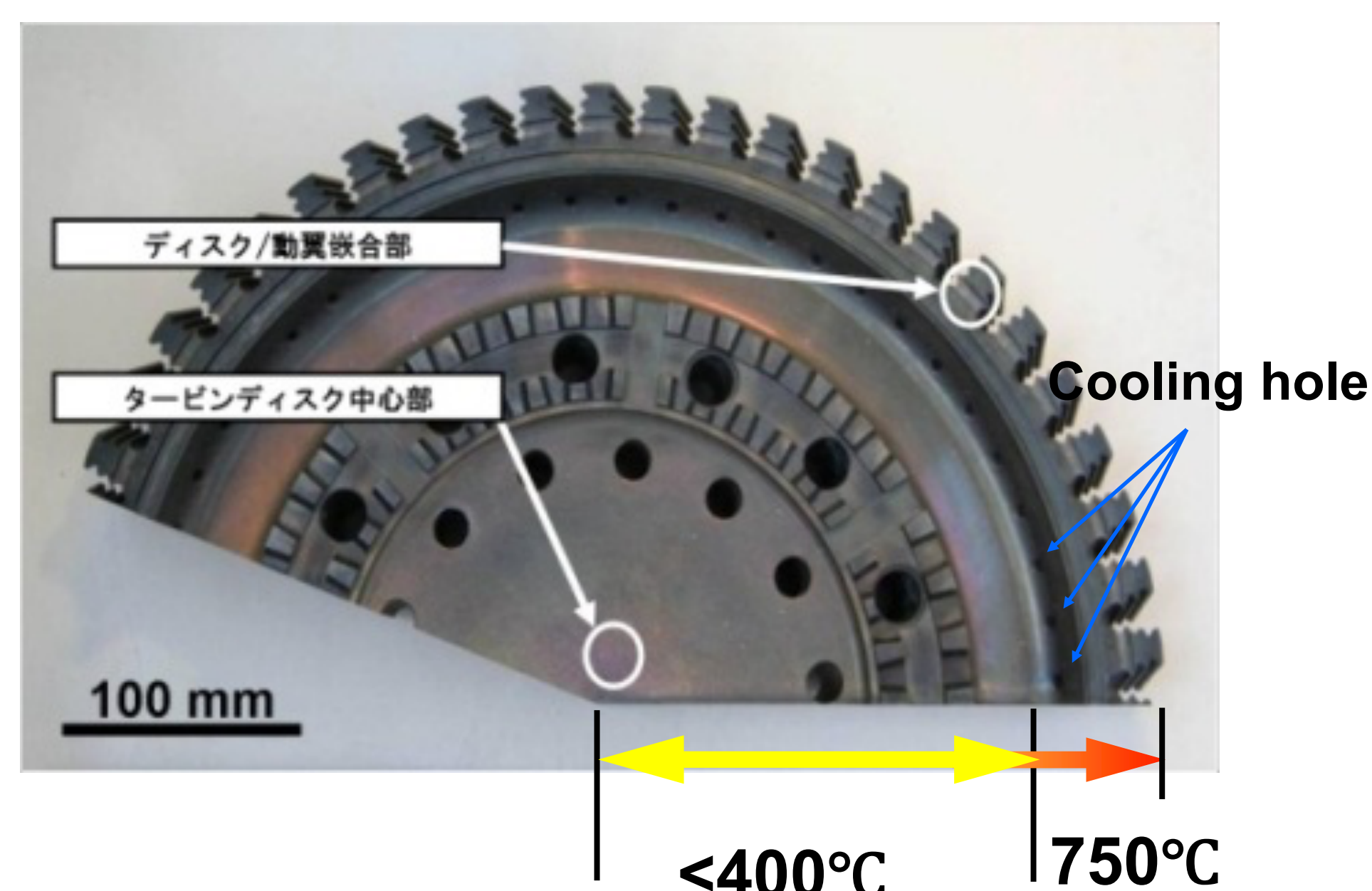
**Elucidation and control of
TBC degradation mechanism**



Dye-sensitised solar cell development



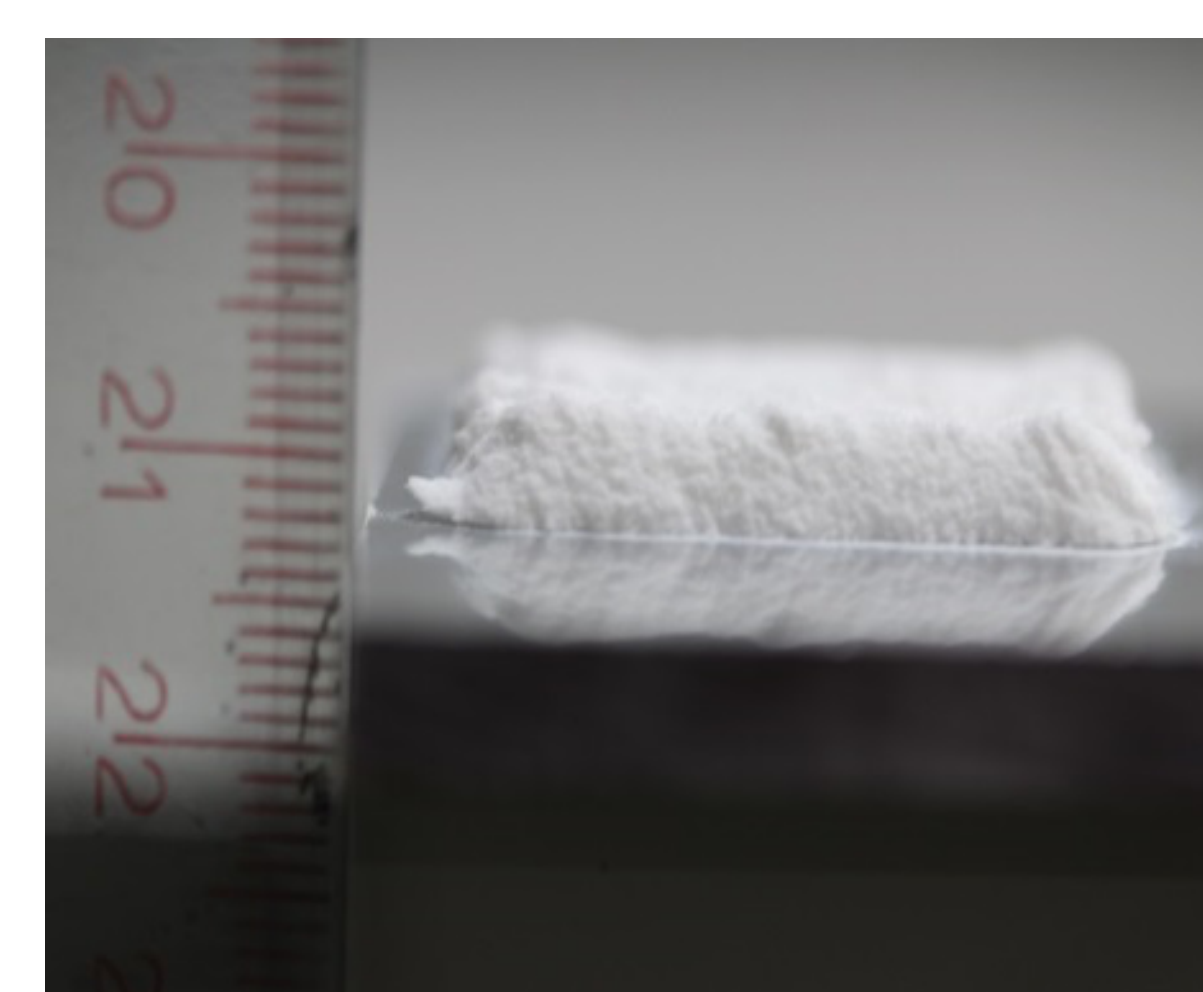
**Nondestructive evaluation for TBC
by means of high-frequency wave**



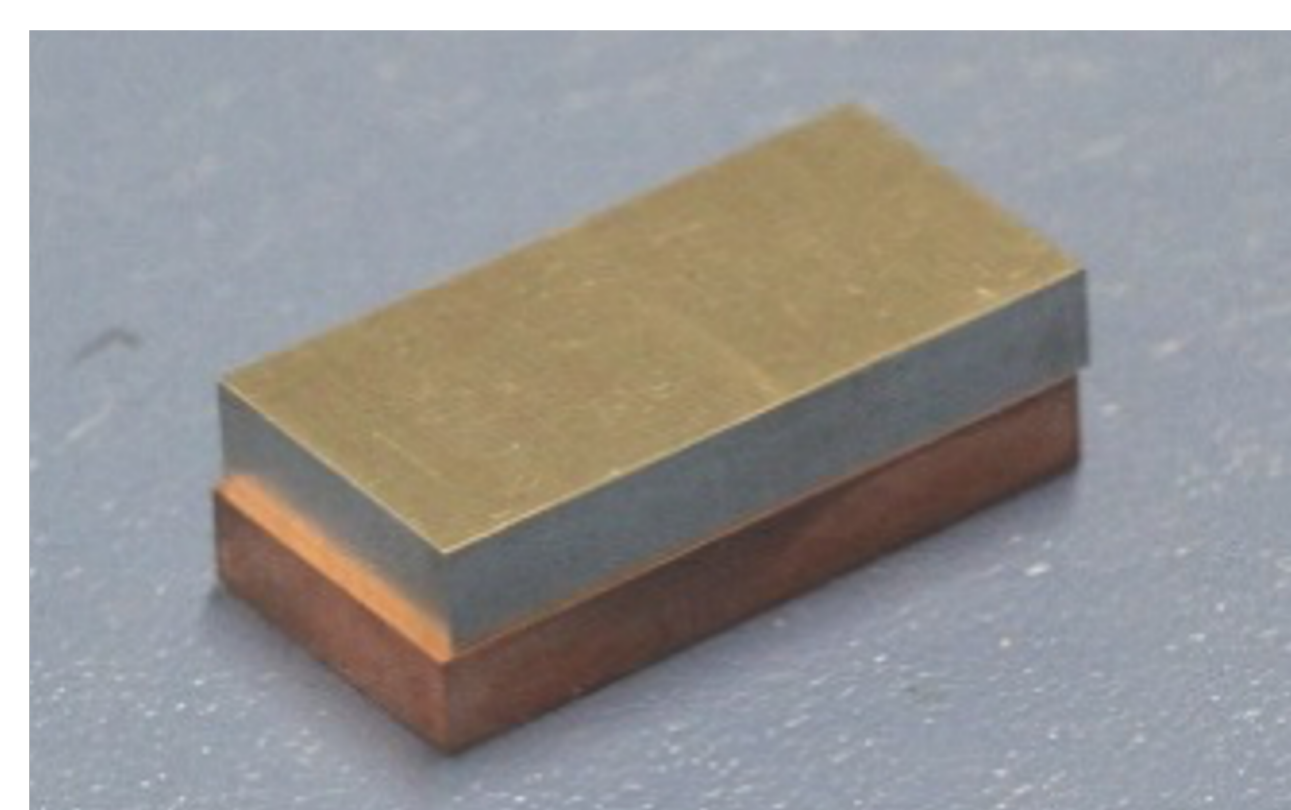
**Re-heat and regeneration
for used turbine disk**

**Establishment of safety science
research for the energy and
environmental material**

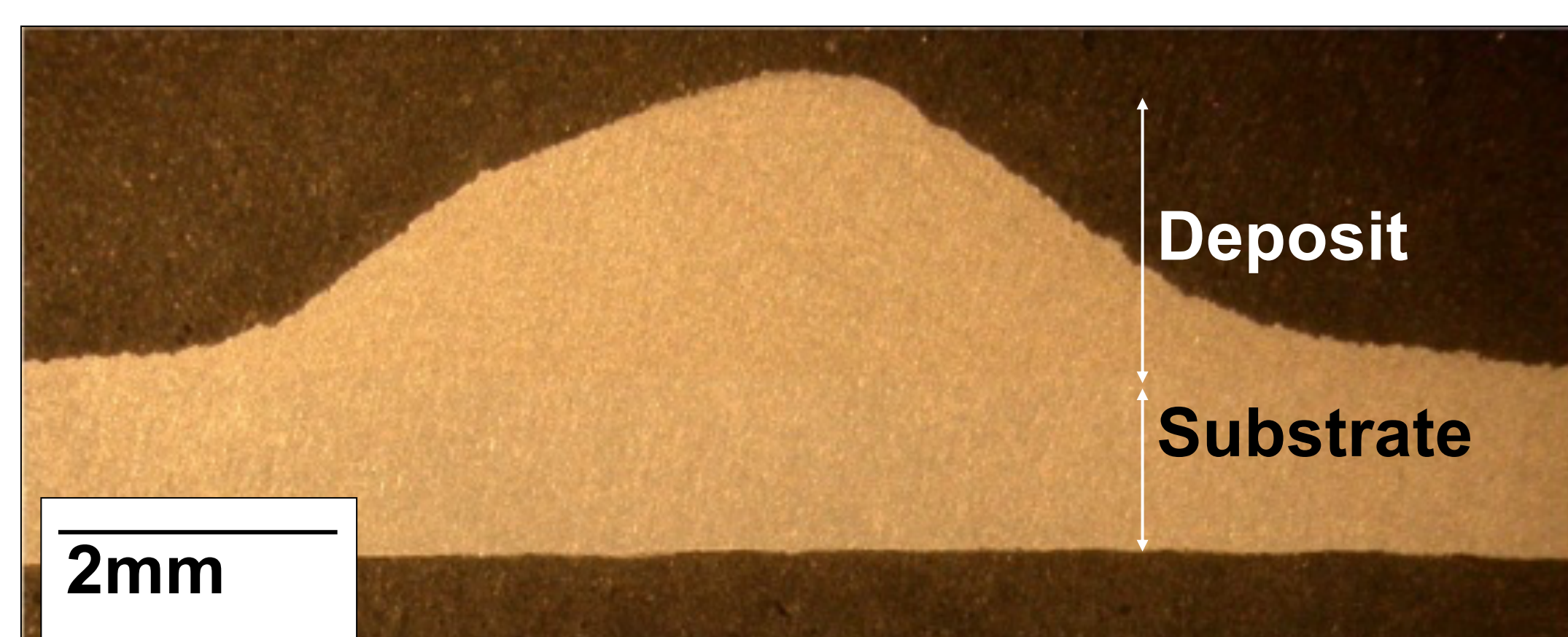
**Evaluation of aging degradation
Degradation mechanism
Safety and reliability assurance
Remaining life assessment**



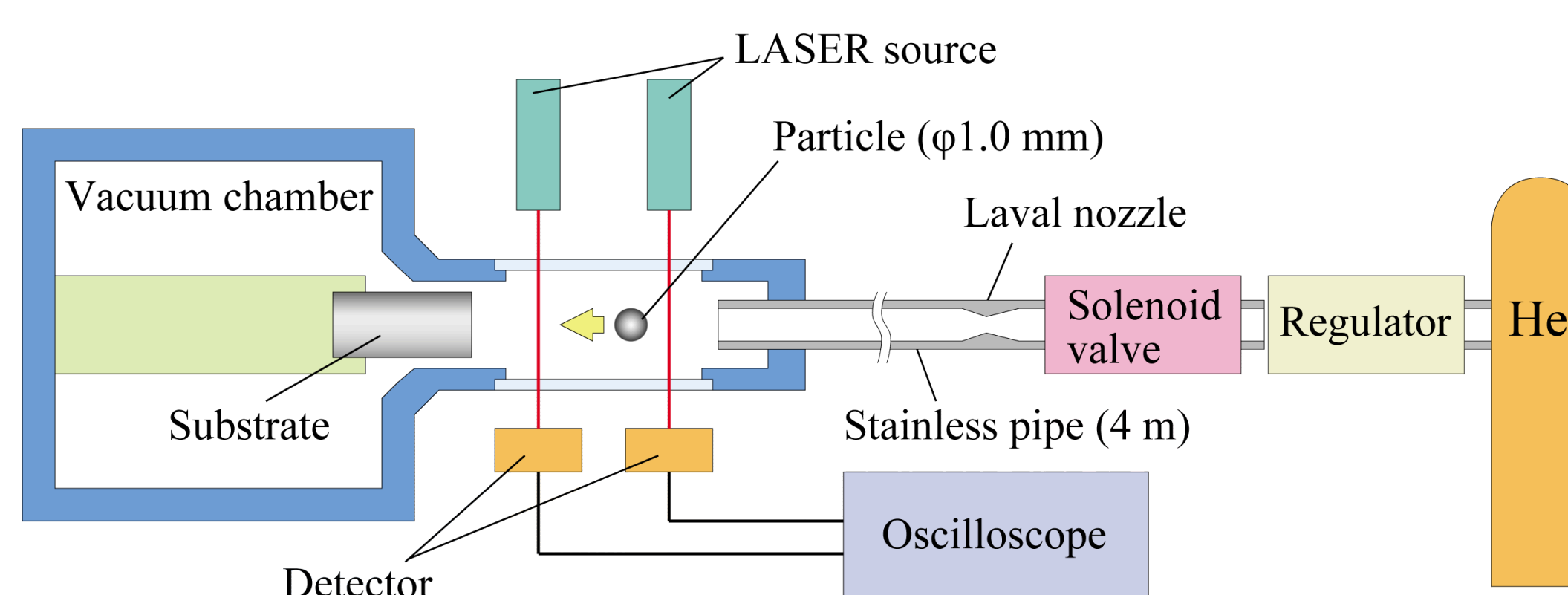
**Whole new way to fabricate
polymer thick deposit**



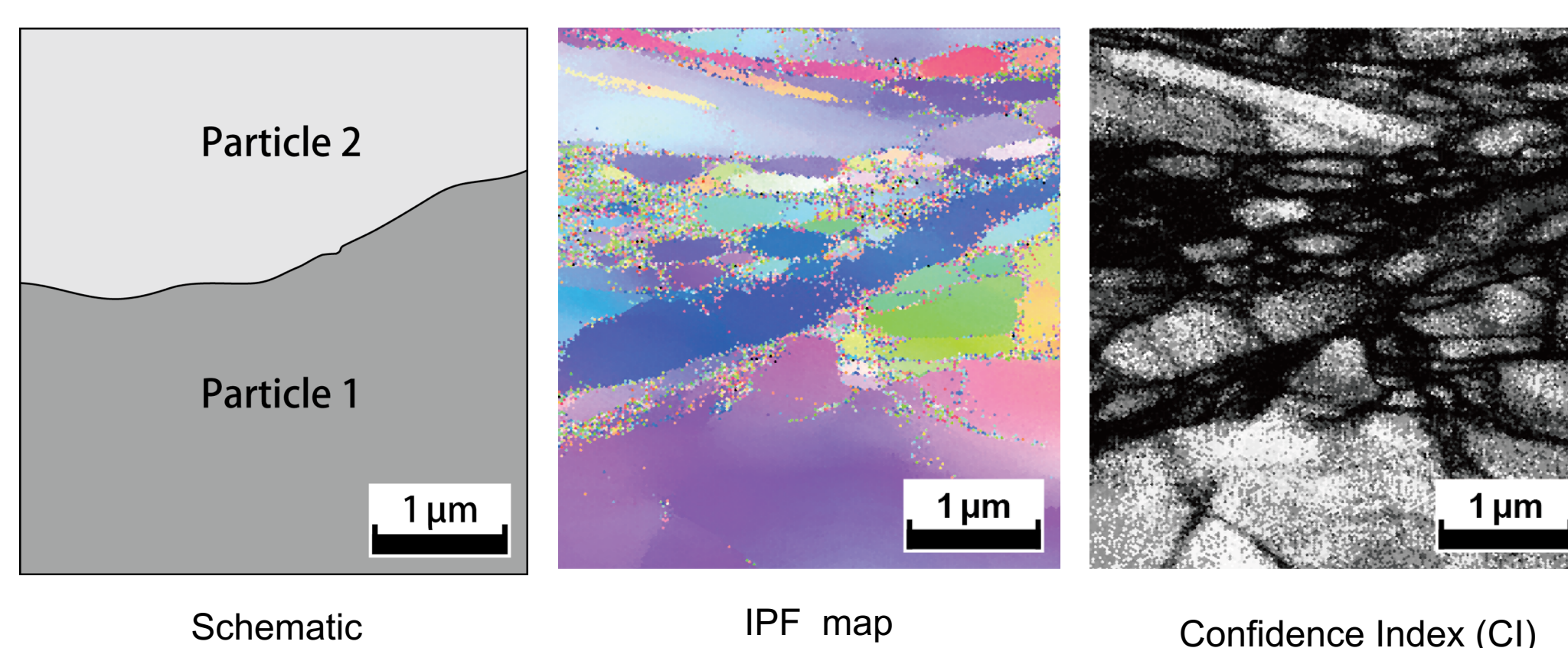
Prototype of specimen



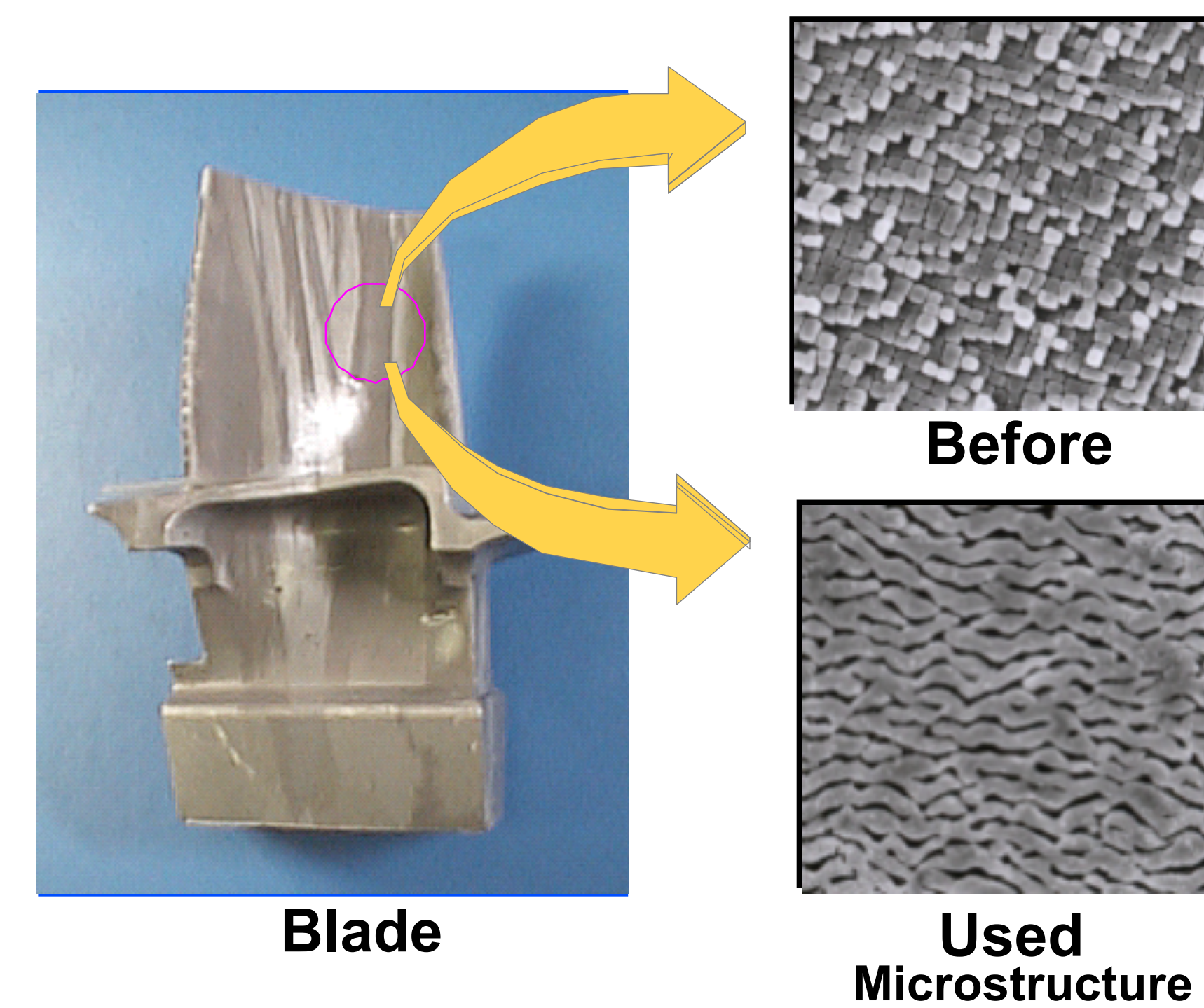
Deposition mechanism study of cold spray



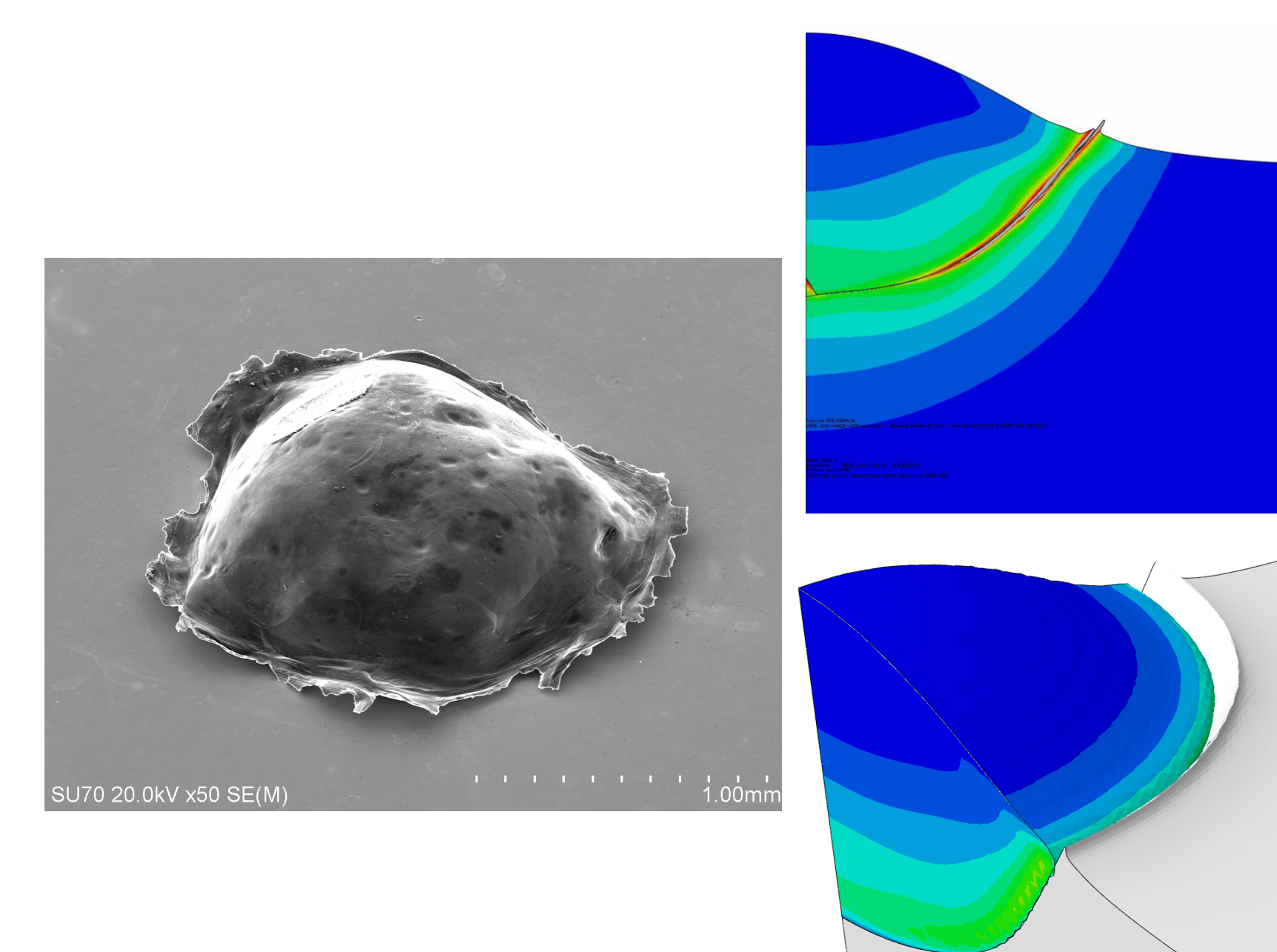
**Development of cold spray
simulation method**



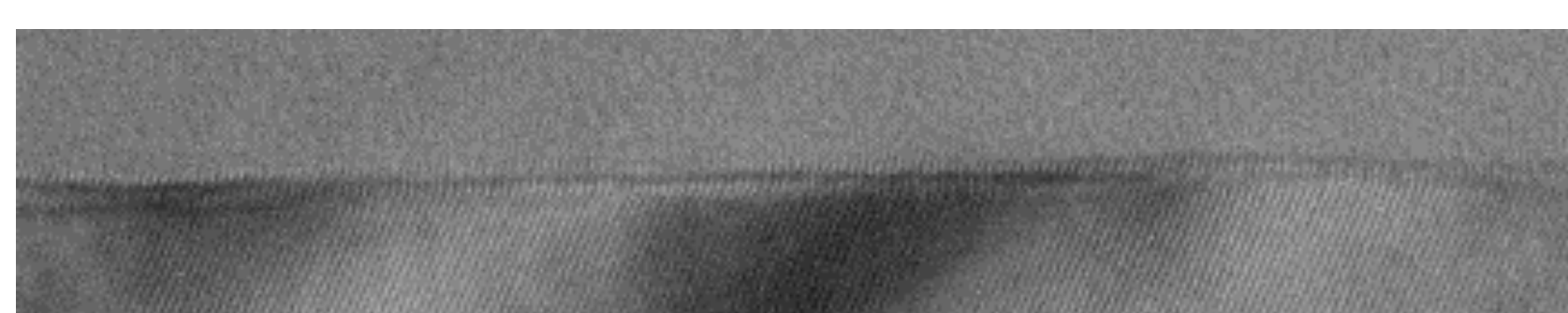
Elucidation of micro structure



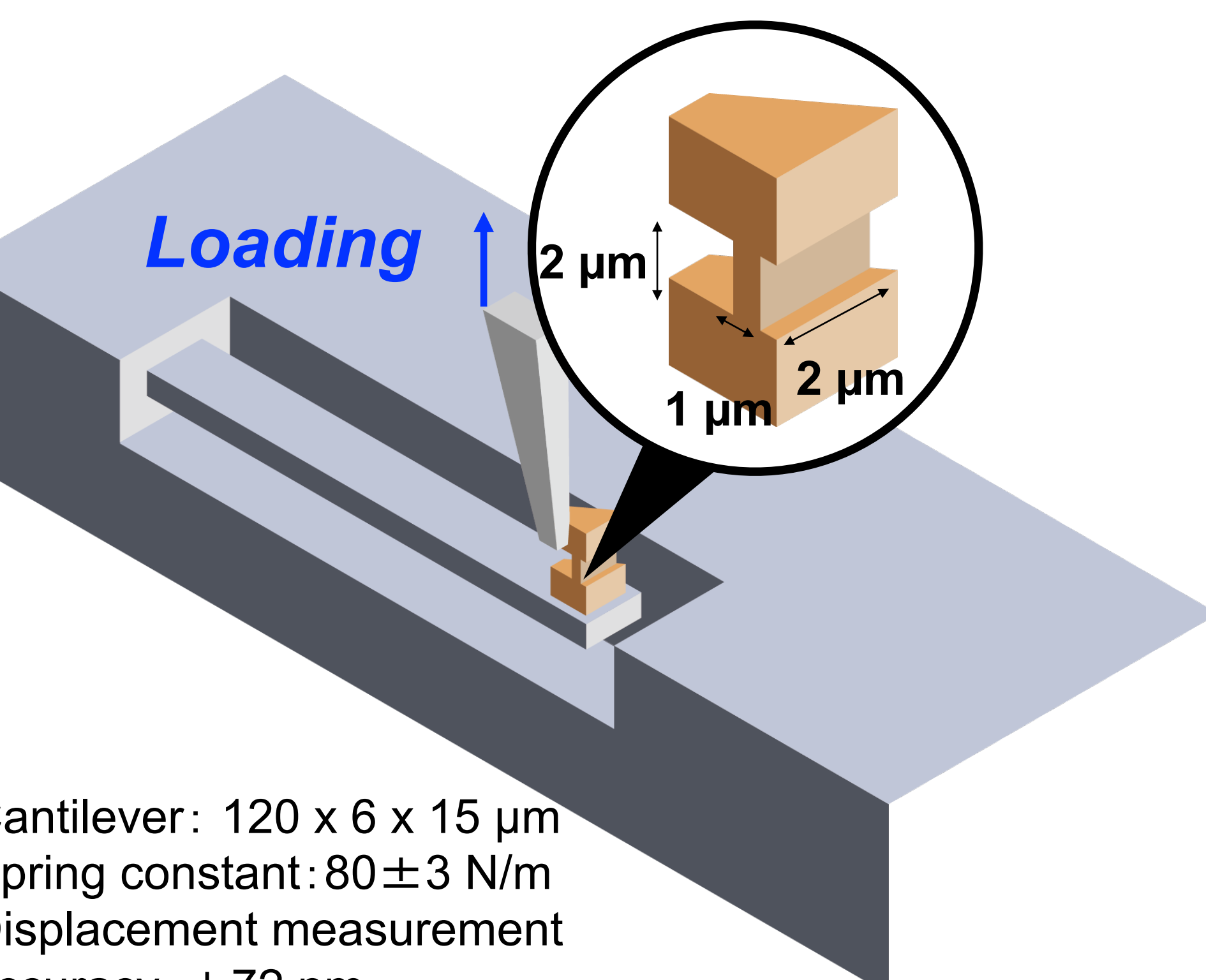
**Evaluation of aging degradation
for gas turbine blade**



**Particle deformation behavior
In cold spray process**



**TEM interface observation result
Room temperature bonding
for bulk materials**



Cantilever: 120 x 6 x 15 μm
Spring constant: 80 ± 3 N/m
Displacement measurement
accuracy: ± 72 nm
Area measurement
accuracy: 4.7 × 10⁻¹⁵ m²

**Micro-scale mechanical evaluation method
for cold-spray deposition**

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